Having thus described the preferred embodiment, the invention is now claimed to be:

1. A video recorder (10) comprising:

means (30) for recording input video data in a time-shift buffer (22) on a portion of a recording medium (24);

means (32) for reading video data from the time-shift buffer (22);

means (42) for independently trimming video data at a chronological beginning of the time-shift buffer to maintain at least a guaranteed minimum available replay time between the chronological beginning of the time-shift buffer and the video data read at a current time;

means (28, 34) for pausing the reading of the video data from the time-shift buffer to pause a current read time;

means (30, 38) for independently enlarging the time-shift buffer at a chronological end of the time-shift buffer with currently input video data.

2. The video recorder as set forth in claim 1, wherein the time-shift buffer (22) comprises a single file.

3. The video recorder as set forth in claim 2, wherein the recording medium (24) is a hard drive.

4. The video recorder as set forth in claim 3, wherein the single file is maintained within a native file system of an operating system included on the video recorder (10).

5. The video recorder as set forth in claim 1, wherein the time-shift buffer (22) includes a plurality of files.

6. The video recorder as set forth in claim 5, wherein the recording medium (24) is a hard drive.

7. The video recorder as set forth in claim 6,

wherein the plurality of files are maintained within a native file system of an operating system included on the video recorder (10).

8. The video recorder as set forth in claim 7, further including a means (37) for performing operations on the plurality of files.

9. The video recorder as set forth in claim 1, further including:

means for terminating the pausing of the reading of video data, such that reading of the video data from the time-shift buffer is recommenced.

10. The video recorder as set forth in claim 1, further including:

means for fast-forwarding through the video data in the time-shift buffer; and

means for contracting the size of the time-shift buffer.

11. The video recorder as set forth in claim 1, further including:

a real-time buffer (52), the input module (30) passing video data to the output module (32) via the real-time buffer (52) when a user is viewing in real time without a time delay.

12. A video recorder (10) comprising:

a hard drive (24);

a varying size time-shift buffer (22) on the hard drive (24), which provides a guaranteed minimum replay time;

an input module (30) for receiving the video input data and writing the video input data to the time-shift buffer (22) on the hard drive (24);

an output module (32) for reading the written video from the time-shift buffer (22) and displaying it via the output video interface (26); and

a trimming module (42) for adjusting the size of the

time-shift buffer (22), such that the size of the time-shift buffer (22) is sufficient to maintain the guaranteed minimum replay time.

13. The video recorder as set forth in claim 12, such that the hard drive (24) includes at least one standard file system for holding the time-shift buffer.

14. The video recorder as set forth in claim 13, further including a file system module (37) for adding, deleting and maintaining files on the at least one standard file system.

15. The video recorder as set forth in claim 14, wherein the time-shift buffer (22) comprises a single file.

16. The video recorder as set forth in claim 14, wherein the time-shift buffer (22) includes a plurality of files.

17. The video recorder as set forth in claim 12, further including:

a first user control (29) for alternately pausing and recommencing the reading of the video data from the time-shift buffer.

18. The video recorder as set forth in claim 17, further including a second user control (29) for fast-forwarding the reading of the video data from the time-shift buffer.

19. The video recorder as set forth in claim 12, further including:

a read pointer (40) utilized by the output module (32) for pointing to the appropriate segment (36) to be read from the time-shift buffer (22); and

a write pointer (38) utilized by the input module (30) for pointing to the appropriate segment (36) to be written in the time-shift buffer (22).

20. The video recorder as set forth in claim 19, further including a real-time buffer (52), the input module (30) passing video data to the output module (32) via the real-time buffer (52) when a user is viewing in real time without a time delay.

21. A method of time-shift buffering comprising:

recording input video data in a time-shift buffer (22) on a portion of a recording medium (24);

reading video data from the time-shift buffer (22);

independently trimming video data at a chronological beginning of the time-shift buffer to maintain at least a guaranteed minimum available replay time between the chronological beginning of the time-shift buffer and the video data read at a current time;

pausing the reading of the video data from the time-shift buffer to pause a current read time;

independently enlarging the time-shift buffer at a chronological end of the time-shift buffer with currently input video data.

22. The method as set forth in claim 21, further including:

terminating pausing the reading of video data, such that reading of the video data from the time-shift buffer is recommenced; and

when the reading of the video data is recommenced, freezing a size of the time-shift buffer.

23. The method as set forth in claim 22, further including:

fast-forwarding through the video data in the time-shift buffer; and

contracting the size of the time-shift buffer.

24. The method as set forth in claim 21, further including:

fast-forwarding through the video data in the time-

shift buffer; and

contracting the size of the time-shift buffer.

25. The method as set forth in claim 21, such that the input module (30), the output module (32) and the trimming module (42) operate as separate processes.

26. The method as set forth in claim 21, such that the input module (30), the output module (32) and the trimming module (42) operate as a single-thread process.

27. The method as set forth in claim 21, further including:

storing input video data in a real-time buffer (52); and

reading video data from the real-time buffer (52), such that the reading video data from the real-time buffer (52) is performed when a user is viewing at a real-time rate without a time-delay.

28. A method for controlling the size of a time-shift buffer comprising:

writing current data to a chronological end of the time-shift buffer, thereby increasing the size of the time-shift buffer;

determining a size by which the time-shift buffer is to be reduced;

trimming a chronological beginning of the time-shift buffer by a largest possible size not exceeding the determined size.

29. The method as set forth in claim 28 wherein the writing and the trimming are performed within a native file system and the time-shift buffer conforms to standards of a file in the native file system.